

**STATE OF OHIO (DAS)**CLASSIFICATION  
SPECIFICATION**CLASSIFICATION SERIES:**

Survey Technician

**SERIES NO.:**

8421

**MAJOR AGENCIES:**

Natural Resources, Transportation

**EFFECTIVE DATE:**

01/09/2005

**SERIES PURPOSE:**

The purpose of the survey technician occupation is to operate survey instruments & equipment to obtain data for boundary control, engineering surveys & construction projects.

At the lower levels, incumbents either operate low-level survey equipment & receive training in operation of more complex instruments or operate more complex survey instruments to obtain survey data.

At the higher levels, incumbents act as crew chief of one survey crew & provide work direction & training in use of survey instruments or supervise all survey crews in assigned district.

**CLASS TITLE**

Survey Technician 1

**CLASS NUMBER**

84211

**PAY RANGE**

26

**EFFECTIVE**

06/26/1994

**CLASS CONCEPT:**

The developmental level class works under immediate supervision & requires working knowledge of & skill in operation of basic survey measuring devices (i.e., rod, chain, tape, plumb bob, water bob & hand level with cross hairs) to assist higher-level survey technicians in obtaining survey data & receive training in use of more complex survey instruments (e.g., transit; automatic level; theodolite; geodimeter).

**CLASS TITLE**

Survey Technician 2

**CLASS NUMBER**

84212

**PAY RANGE**

28

**EFFECTIVE**

01/09/2005

**CLASS CONCEPT:**

The full performance level class works under general supervision & requires considerable knowledge of surveying & skill in operation of all types of survey measuring instruments in order to set up & operate equipment to obtain survey data & perform calculations for determination of precise measurements.

**CLASS TITLE**

Survey Technician 3

**CLASS NUMBER**

84213

**PAY RANGE**

29

**EFFECTIVE**

01/09/2005

**CLASS CONCEPT:**

The advanced level class works under general direction & requires thorough knowledge of surveying & skill in operation of all types of measuring devices in order to act as lead worker of survey crew engaged in obtaining survey data & provide instruction in theory, practice & methods of surveying & in operation & maintenance of surveying instruments.

**CLASS TITLE**

Survey Technician Supervisor

**CLASS NUMBER**

84215

**PAY RANGE**

10

**EFFECTIVE**

10/04/1992

**CLASS CONCEPT:**

The supervisory level class works under direction & requires thorough knowledge of surveying & skill in operation of measuring devices in order to supervise survey technicians, directs all survey crews in assigned district & coordinate requests for survey data.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Survey Technician 1	84211	07	06/26/1994	26

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Operates lower-level survey measuring devices (i.e., rod, chain, tape, plumb bob) to assist in obtaining precise measurements of designated area.

Clears brush & foliage from line of survey; sets up targets on tripods over points for measurements; locates &/or sets monuments, pins or stones; marks survey points for identification; takes field notes on topographic sketches; sets up traffic control (e.g., signs, cones); flags traffic through survey area.

Assists in maintenance of survey equipment; cleans & services survey trucks/vans; stocks survey truck/van with necessary supplies & equipment for field work.

Receives training in operation of more complex survey devices (e.g., theodolite, transit, data collector/recorder, electronic distance measurer, automatic level, plotting of field data for the preparation of survey drawings).

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of geometry; trigonometry; surveying\*. Skill in operation of basic survey measuring devices (i.e., rod, chain, tape, plumb bob)\*; operation of more complex measuring devices (e.g., transit; theodolite; geodimeter; data collector/recorder, electronic distance measurer, automatic level)\*. Ability to understand system of procedures; read, copy & record figures; gather, collate & classify data; demonstrate physical agility; lift 50 pounds; cooperate with co-workers.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

1 course or 3 mos. exp. in geometry; 1 course or 3 mos. exp. in trigonometry; must be able to provide own transportation.

-Or 3 mos. trg. or 3 mos. exp. in field survey; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Exposed to inclement weather, traffic, rough terrain, poisonous plants & insects; may work flexible hours; may work in shallow water/boat; requires travel.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Survey Technician 2	84212	07	01/09/2005	28

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Operates higher-level survey measuring devices & instruments (e.g., theodolite, transit, automatic level, geodimeter; electronic distance measurer, total station, data collector) in order to obtain survey data & calculate precise measurements (e.g., elevations, horizontal & vertical lines, cross sections, curves, angles).

Assists survey crew chief in researching land titles & deeds for location of control points; contacts private landowners for permission to survey on their property &/or answer inquiries regarding survey; makes mathematical calculations for curves, property surveys, transverse lines & bench lines.

Records survey field notes on topography, curve data & other measurements.

Acts as crew chief in absence of regularly assigned lead worker to assure survey work is being completed properly.

Assists in maintenance of survey instruments & vehicles; stocks survey truck/van with necessary supplies; plots field data for the preparation of survey drawings.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of geometry; trigonometry; surveying; employee training & development\*. Skill in operation of all types of survey measuring devices (e.g., transit, theodolite). Ability to understand system of procedures; read, copy & record figures; gather, collate & classify data; demonstrate physical agility; lift 50 pounds; cooperate with co-workers.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

Current American Congress of Surveying & Mapping level two (2) technician certificate; must be able to provide own transportation.

-Or completion of associate core program of applied science in surveying, civil engineering or construction technology; 6 mos. trg. or 6 mos. exp. in field survey; must be able to provide own transportation.

-Or 24 mos. trg. or 24 mos. exp. working as an instrument operator on survey field crew; must be able to provide own transportation.

-Or 12 mos. exp. as Survey Technician 1, 84211; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Exposed to inclement weather, traffic, rough terrain, poisonous plants & insects; may work flexible hours; may work in shallow water/boat; requires travel.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Survey Technician 3	84213	07	01/09/2005	29

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Acts as lead worker (i.e., provides work direction & training) over survey crew engaged in obtaining survey data for construction projects or natural resource boundary control & engineering surveys, instructs, advises & trains lower-level survey technicians in theory, practice & methods of surveying & in operation, care & maintenance of surveying instruments.

Researches state, county & municipal records relative to accurate completion of preliminary & boundary surveys; takes notes, searches records, land deeds & titles; prepares notes to present clear view of project; does mathematical computations & prepares time sheets & car mileage sheets.

Contacts supervisors, utilities, planners & property owners concerning survey work; sets up traffic control; operates all survey equipment as required; drafts or plots survey drawings from field data or office calculations.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of geometry; trigonometry; surveying; employee training & development\*. Skill in operation of all types of surveying instruments. Ability to apply principles to solve practical, everyday problems; read, copy & record figures; gather, collate & classify data; demonstrate physical agility; lift 50 pounds; establish friendly atmosphere as survey crew chief.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

Current American Congress of Surveying & Mapping level three (3) technician certificate; must be able to provide own transportation.

-Or completion of undergraduate core program in surveying, civil engineering or construction technology; 6 mos. trg. or 6 mos. exp. as instrument operator on survey field crew; must be able to provide own transportation.

-Or 12 mos. exp. as Survey Technician 2, 84212; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Exposed to inclement weather, traffic, rough terrain, poisonous plants & insects; may work flexible hours; may work in shallow water/boat; requires travel.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Survey Technician Supervisor	84215	EX	10/04/1992	10

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Supervises survey technicians & directs all work of survey crews in assigned district, monitors & schedules all field work for survey crews, orders & maintains survey equipment & coordinates work of survey crews with design groups.

Performs preliminary surveys to establish project location; discusses proposed route locations with those concerned & explains how they will be affected; obtains additional information by researching public records & contacting owners, surveyors & officials; prepares survey reports & maintains related records.

Ensures survey crews have adequate equipment & information to complete field work; maintains inventory of district surveying equipment; works as member of survey crew when personnel are absent; operates all types of survey instruments & measuring devices; drafts or plots survey drawings from field data or office calculation.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of geometry; trigonometry; surveying; employee training & development; supervisory principles/techniques\*. Skill in operation of all types of survey instruments & measuring devices. Ability to apply principles to solve practical, everyday problems; write meaningful, concise & accurate reports; gather, collate & classify data; demonstrate physical agility.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

30 mos. trg. or 30 mos. exp. in surveying work that includes operation of all types of surveying instruments & measuring devices; 6 mos. trg. or 6 mos. exp. in employee training & development; 1 course or 3 mos. exp. in geometry; 1 course or 3 mos. exp. in trigonometry.

-Or 6 mos. exp. as Survey Technician 3, 84213.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

May be exposed to inclement weather, traffic, rough terrain, poisonous plants & insects. May work in shallow water/boat.